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1: Cell Mol Neurobiol. 2002 Aug;22(4):455-62.

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### Transient forebrain ischemia increases the blood-brain barrier permeability for albumin in stroke-prone spontaneously hypertensive rats.

Abrahám CS, Harada N, Deli MA, Niwa M.

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1. The aim of the present study was to reveal the effect of transient forebrain ischemia on the regional and temporal changes in the permeability of the blood-brain barrier (BBB) permeability for sodium fluorescein (MW: 376 Da) and Evan's blue-labeled albumin (MW: 67 kDa) in stroke-prone spontaneously hypertensive rats (SHRSP). 2. BBB permeability was significantly higher in the brain regions of 16-week-old control SHRSP than those in age-matched normotensive Wistar-Kyoto rats. 3. Transient forebrain ischemia evoked by 10-min bilateral carotid occlusion increased the permeability of the BBB for albumin, but not for sodium fluorescein, after 6 and 24 h of reperfusion in brain regions of SHRSP. 4. Extravasation of serum macromolecules may contribute to neuronal loss and development of hypertensive encephalopathy in SHRSP.

PMID: 12507394 [PubMed - indexed for MEDLINE]

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